A Study of Relationship of Academic Achievement to Aptitude, Attitude and Anxiety of M.Ed. Students studying under Dr. Babasaheb Ambedkar Marathwada University Jurisdiction

Final Synopsis of the research work completed for fulfillment of
Ph.D. degree in the Faculty of Education

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INDEX

Sr. No.	Topic	Page No.
1	Introduction	2
2	Need & Significance of the Study	3
3	Statement of Problem	3
4	Operational Definition	4
5	Review of Related Researches	6
6	Assumptions	6
7	Objectives	7
8	Hypothesis	7
9	Research Methodology	8
10	Tools used for the Study	9
11	Population & Sample	9
12	Data Collection & Analysis	9
13	Major Findings	9
14	Conclusions	10
15	Recommendations	10
16	Bibliography	10

1. INTRODUCTION

India is a developing country. It needs competent teachers to build up a strong foundation for its growth and development. It is believed that the quality of nation depends on the quality of its citizens; quality of its citizens depends more than any other features on the quality of their education. The quality of education in turn depends to a great extend upon the quality of their teachers. Dr. Radhakrishnan, our former President and Chairman of the University Education Commission (1949) rightly observed, "The Teacher's place in the society is of vital importance. He acts as the pivot for the transmission of intellectual traditions and technical skills from generation to generation and helps to keep the lamp of civilization burning." Teachers are therefore regarded as the custodians of the present as well as the future.

Gone are the days when the teacher was the supreme master of the educational arena. He was the school, the textbook and he was the moral force. Nobody was there to rival, to share his responsibility and to supplement his efforts. But the conditions have changed and the situations have improved. Many agencies of education have come, several media have emerged and a variety of materials are being used for education. There are radios, television, newspapers and other materials, there are meetings, conferences and congregation of all kinds, political, social, cultural, literary and religious and all these also have educational roles to play and individuals are all exposed to such learning.

It is here that importance of personality parameters like Attitude, Aptitude and Anxiety of the teacher comes into picture. The teacher should have an interest and inclination and then only he will be able to do justice with the profession. Teachers are responsible for shaping future citizens. In the recent years, there has come to be a gradual recognition of the fact that personality and motivational variables are important correlates of scholastic achievement along with the intellectual aptitudes. Much attention has been given to the impact of attitude, aptitude and anxiety on the student achievement in the teaching and learning process. Various teaching techniques and methodologies have been developed for the purpose of alleviating anxiety in order to maximize learning. Although numerous studies have indicated that positive aptitude and attitude tend to facilitate learning process, there have been very few quantitative studies on the role of anxiety in achievement.

In the above context, it is pertinent to seek correlates of the achievement of teacher-trainees in college of education. Researcher wanted to know whether the teacher who has high score at the end of completion of training had high teaching attitude and aptitude. While it holds true that anxiety does not always necessarily affect a person negatively, excessive levels of anxiety can inhibit the ability to teach effectively. This in turn, could be detrimental to learning.

In the present study, the researcher gathered data on aptitude, attitude and anxiety level of the trained teachers (M.Ed. students) to investigate the relationship of these variables to their academic achievement. Researcher believes that this study would help to establish the role of anxiety as yet another variable in pre-service Graduate teachers training program.

2. NEED & SIGNIFICANCE OF THE STUDY

1. Teacher training should be provided to those students who apart from excelling in their studies also have favorable attitude and aptitude to be a competent teacher. Therefore the researcher wanted to find the relationship between teaching attitude and aptitude of the M.Ed. student with academic achievement.

2. Anxiety is generally considered a psychological problem and left behind and never considered prevalent. But considering the fast paced life and other responsibilities, high anxiety is a very common phenomenon. Hence cannot be ignored in the present times and this study provides an insight into the role of anxiety in academic achievement.

3. The Researcher felt that by understanding the correlates of academic achievement, the study would help in recognizing the importance of personality parameters like attitude towards teaching profession, aptitude toward teaching profession and anxiety level in the field of teacher training.

3. STATEMENT OF PROBLEM

A study of relationship of Academic Achievement to Aptitude, Attitude and Anxiety of M.Ed. Students studying under Dr. Babasaheb Ambedkar Marathwada University Jurisdiction

4. OPERATIONAL DEFINITION

1. Academic Achievement - The percentage of marks obtained by the M.Ed. student for the pre-service graduate teacher training (Bachelor of Education, B.Ed.) course.

2. Aptitude – The score obtained on the standardized Teacher Aptitude Test Battery (TATB) developed by Jai Prakash and R.P. Shrivastava and recognized by National Psychological Corporation, Agra.

3. Attitude – The score obtained on the standardized Teacher Attitude Inventory (TAI) designed by Dr. S.P. Ahluwalia and recognized by National Psychological Corporation, Agra.

4. Anxiety - The score obtained on the standardized Comprehensive Anxiety Test (CAT) developed by Sharma, R. L. Bharadwaj and M. Bhargava and recognized by National Psychological Corporation, Agra.

5. Dr. Babasaheb Ambedkar Marathwada University - A renowned university located in Aurangabad city in the Marathwada region of Maharashtra state.

5. REVIEW OF RELATED RESEARCHES

A summary of the writings of recognized authorities and of previous research provides evidence that the researcher is familiar with what is already known and what is still unknown and untested. The researcher studied thirty three past researches out of which eleven were related to Teaching Aptitude, eight were related to Teaching Attitude and fourteen were related to anxiety study.

Teaching aptitude and teaching attitude being an important parameter, several studies have been conducted in this area of research. Studies have indicated that teaching aptitude has a positive correlation with academic achievement (Dushyant Kaur, 2007 and Arya Saurabh, 2013) and has a significant relationship with academic achievement (M.B. Ushakumari, 2008). The relationship between Teaching Attitude and academic achievement was not found to be significant (GCPI, 1981 and Mamta Garg & Sudesh Gakhar, 2009).

The teaching aptitude of male and female teachers varies significantly (S.M Ganoje, 2011) with female trainees have higher teaching aptitude than male trainees (Anita Devi, 2013 and Arya Saurabh, 2013). Teaching Attitude was generally found positive, the attitude of girls was more positive as compared to boys and Government college students had a more positive attitude towards teaching profession as compared to private colleges (Pradeep V Patil, 2000).

It was also found that elementary school teachers have more teaching aptitude than the secondary school teachers (Jan Tasleema, Malik Muddasir Hamid, 2012) and the secondary school men and women science teachers have a significant difference in their teaching aptitude with the men science teachers having a higher teaching aptitude than women science teachers (Rao D B, 2013) but the teaching aptitude did not vary significantly for government financed and self financed teachers (Anita Devi, 2013). There was no difference in the attitude of teachers in aided and unaided schools with reference to gender, experience, academic qualification, pay-scale and level of education (Thilakan Sindhu, 2013 and Mishra SG, 2007).

There is no significant correlation between the job satisfaction and teaching aptitude (Rajnishumar Kumar Singh, 2013) but, job satisfaction and attitude towards teaching were positively related to each other (Singh, 2002). Teaching aptitude was found to be significantly positively correlated to English Language Teaching Ability, motivation and teaching competence (Prasad Kanbhampati, 2013). In pre-service teacher educators it was indicated that there is an overall trend of positive attitudes towards mathematics and teaching mathematics (Beth Southwell, Jenni Way, Allen White, Bob Perry, 2005). A significant positive correlation was found between the admission test score and teaching attitude but negative correlation with academic achievement (Mishra SG, 2007)

Anxiety and its relationship to academic achievement is not widely studied especially in the area of teacher education. The relationship between test anxiety and scholastic achievement is negative and significant i.e., the more anxious the student is, the less achievement is his/her performance in the examination for statistics, mathematics and medical students (Ilangovan K.N & Rangaraj K.R, 2001; Yeh YC and others, 2007 and El-Anzi & Freih Owayed, 2005). Another study concluded that there is a significant difference in the anxiety of intermediate arts and science students and the anxiety is negatively correlated to academic achievement (Talwar Vibha, 2013). Academic achievement could be enhanced by manipulating the levels of anxiety, emotional maturity and social maturity and anxiety showed negative relationship with academic achievement (Singh Surjit, 2013). The successful (passed) science male students had significantly high anxiety than the successful female science students but there was no significant difference between the anxiety of male and female failed students (Vandana Gupta, 2014).

A negative relationship exists between statistics anxiety and attitudes about statistics (Fadia Nasser, 1999). The students of physical education were found to be moderately anxious and concerned on teaching practice (Susan A Capel, 1997). For the pre-service teachers the mathematics anxiety was associated with efficaciousness toward mathematics teaching practices and was the basis for their mathematics teaching efficacy beliefs (Gina Gresham, 2008). There were statistically significant differences in mathematics teaching anxiety between convergent and the other three types of learners: divergent, accommodator, and assimilator with convergent learners having less mathematics teaching anxiety than the other types of learners and divergent learners showed the highest level of mathematics teaching anxiety (Murat Peker, 2009).

The anxiety level also differed significantly gender wise in some studies whereas in some studies no such significant differences were observed. The anxiety of female college students was significantly more than male students (Sultania MK, 2009). Boys and girls as well as rural and urban students differed significantly on the basis of their anxiety (Singh Surjit, 2013). It has also been found that there is no significant difference between Academic Anxiety of the male and female students of Xth class in both Private

and Government Schools (Dhull Jitendra, 2013). Boys and girls did not differ significantly with respect to their mean score on academic anxiety, but still the mean score of girls was higher than boys indicating girls possess higher academic anxiety in comparison to boys (Kanchan Bala, 2014).

In a study to examine pre-service teachers' practicum-based mathematics classroom teaching experiences and its contribution to their anxiety, it was found that locus of control played an integral part in increasing vs. decreasing mathematics teaching anxiety (Amy Brown , Arla Westenskow & Patricia Moyer-Packenham, 2012). The teaching effectiveness and anxiety were negatively correlated with each other in the case of teacher educators working in Government as well as self financed teacher education institutions (Satish Kumar, 2013).

The studies recommended that efforts be made to test the teaching aptitude more comprehensively in the admission test and its weight age may also be increased. Though teaching attitude was not found to be significant correlate of academic achievement, it had significant correlation with job satisfaction. Anxiety was found to be significant correlate with academic achievement. The studies showed that mild level of anxiety actually helped in academic achievement but higher levels of anxiety resulted in lower academic achievement. These studies were conducted mostly for students and very few studies are related to teacher education students. Also despite some significant studies on teaching attitude and aptitude on pre-service and in-service teacher trainees, anxiety and its effect was not extensively studied for the teacher education students.

6. ASSUMPTIONS

The researcher has made the following assumptions for this study:

1. The M.Ed. students have completed the graduate pre-service teacher training (B.Ed.) degree course.
2. Personality traits like aptitude, attitude and anxiety are not dependent on the faculty of graduation to which the M.Ed. student belongs.
3. Anxiety is not considered as a factor during assessment at any level in the colleges of education.
4. The evaluation system in the colleges of education affiliated to Dr. Babasaheb Ambedkar Marathwada University is impartial.
5. The practical and theoretical aspects of the curriculum covered in all the Colleges of Education affiliated to Dr. Babasaheb Ambedkar Marathwada University are similar.

7. OBJECTIVES

1. To study the levels of aptitude, attitude and anxiety in M.Ed. students.
2. To study the aptitude, attitude and anxiety of M.Ed. students gender–wise.

3. To study the correlation of aptitude score of M.Ed. students with their academic score
4. To study the correlation of attitude score of M.Ed. students with their academic score.
5. To study the correlation of anxiety score of M.Ed. students with their academic score.
6. To study the relationship between academic achievement score of M.Ed. students with their attitude, aptitude and anxiety score.

8. HYPOTHESIS

The researcher in this study has made the following hypothesis:

1. There is significant positive correlation between aptitude score and academic achievement score.
2. There is significant positive correlation between attitude score and academic achievement score.
3. There is significant negative correlation between anxiety score and academic achievement score.
4. Aptitude score, attitude scores and anxiety scores are significant predictors of academic achievement score.

Null Hypothesis:

1. There is no significant difference between the aptitude of male and female M.Ed. students.
2. There is no significant difference between the attitude of male and female M.Ed. students.
3. There is no significant difference between the anxiety of male and female M.Ed. students.

9. RESEARCH METHODOLOGY

The researcher has used the Quantitative research for this study using Descriptive methodology. The research method used for this Study is Survey Method as the survey method gathers data from a relatively large number of cases at a particular time.

This method is selected because of following reasons:

1. It is the most appropriate in collecting the data regarding the personality parameters to be studied in this research from a relatively large sample.

2. This research problem does not deal with the past events and concentrates only on present situation.
3. Data could be easily collected after deciding the sample form the vast population using survey method.
4. Also quantitative techniques can be easily incorporated in Survey method and generalization is possible.
5. Manipulation of variables was not the plan of action decided by the researcher.

10. TOOLS USED FOR THE STUDY

The researcher collected the data regarding the aptitude, attitude and anxiety of the M.Ed. students using the following standardized tools:

1. Teacher Aptitude test developed by Jai Prakash and R.P. Shrivastava
   This test is meant for measuring the aptitude towards teaching profession. The scale has 10 sub-tests and a total of 150 items. Each sub-test contains 15 items. There is no time limit for the test but the examinees generally complete it within 30 minutes.

2. Teacher Attitude Inventory developed by S.P. Ahluwalia
   It is a very popular valid and reliable inventory for assessment of Teaching Attitude designed by Dr. S.P. Ahluwalia in the year 1974 and recognized by National Psychological Corporation, Agra. This Inventory is a 90-item instrument consisting of six sub-scales. Each scale has 15 statements that pertain to a particular aspect of prospective and practicing teacher's professional attitudes.

3. Comprehensive Anxiety Test developed by Sharma, R. L. Bharadwaj and M. Bhargava
   It is a self administering scale suitable for individual and group testing. Before administering the scale, it is advisable to emphasize orally that each reply should be checked as quickly as possible. No time limit has been set for the test. However, it is seen that most of the groups or individual finish it in 10-15 minutes. The test is highly reliable and valid. It has 90 items relating to the symptoms of the anxiety and possesses the capacity to evoke the responses correctly.

4. The academic achievement score is the final percentage of marks obtained in B.Ed. course. It was collected using a self-made form.

11. POPULATION & SAMPLE

The population for this study is the students enrolled for the Post-Graduate program in Education (M.Ed. course) in the two departments and fourteen (14) colleges of education affiliated to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

Total 296 M.Ed. students were selected as a random sample for the study**.**

12. DATA COLLECTION & ANALYSIS

The researcher for this study has collected the data using Teacher Attitude Inventory (TAI) by Dr. S. P. Ahluwalia, Teacher Aptitude test developed by Jai Prakash and R.P. Shrivastava, and Comprehensive Anxiety Test developed by Sharma, R. L. Bharadwaj and M. Bhargava. The academic achievement score and gender of the M.Ed. students was collected using a self-made form. The researcher used MS-Excel for data tabulation and analysis. The statistics used for data analysis and hypothesis testing were coefficients of correlation and theory of Regression Analysis.

13. MAJOR FINDINGS

1. There is no significant difference in the Aptitude score of Male and Female M.Ed. students.

2. There is no significant difference in the Attitude score of Male and Female M.Ed. students.

3. There is a significant difference in the Anxiety score of male and female M.Ed. students.

4. The Anxiety score of male students is higher than that of female students.

5. The correlation between achievement score and aptitude score is positive.

6. The correlation between achievement score and attitude score is positive.

7. The correlation between achievement score and anxiety score is negative.

8. Aptitude score and Anxiety score significant predictors of Achievement score but Attitude score is not a significant predictor of Achievement score.

14. CONCLUSIONS

1. The teaching aptitude and attitude is not related to gender but the anxiety level is significantly different among male and female students.

2. Though teaching attitude and aptitude are positively correlated to academic achievement, teaching attitude is not a significant predictor of academic achievement.

3. The anxiety is negatively correlated to academic achievement and is significant predictor of it.

15. RECOMMENDATIONS

It is recommended that personality parameters should also be considered significant along with the academic scores of the teacher educators. The present study showed that teaching aptitude is having a positive significant relationship with academic achievement so it is recommended that efforts be made to test the teaching aptitude more comprehensively in the admission test and its weight age may also be increased. As the anxiety level was found to be significant correlate with academic achievement, it is recommended that several measures to reduce anxiety should be undertaken in the field of teacher education. The role of anxiety in other personality parameters as well as in other aspects of teacher education should be studied more extensively.

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